

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 1

	10/705,235
Filing Date	November 10, 2003
First Named Inventor	Hideki Kuwajima
Art Unit	2853
Examiner Name	George J. Letscher
Attorney Docket No.	YAO-4337US4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
[Signature]		US-6,046,884	04/04/2000	Crane	
		US-5,856,896	01/05/1999	Berg et al.	
		US-6,118,637	09/12/2000	Wright et al.	
		US-6,078,473	06/20/2000	Crane et al.	
		US-6,297,936	10/02/2001	Kant et al.	
		US-6,061,208	05/09/2000	Hattori	
		US-5,243,482	09/07/1993	Yamaguchi et al.	
		US-6,327,120	12/04/2001	Koganezawa et al.	
		US-6,038,104	03/14/2000	Sato et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
[Signature]		JP3-097174 (with English Abstract)	04/23/1991	Fujitsu, Ltd.		<input type="checkbox"/>
		JP6-150596 (with English Abstract)	05/31/1994	Toshiba Corp.		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

Examiner Signature	GEORGE LETSCHER	Date Considered	2/21/05
--------------------	-----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known

Application Number	To Be Assigned 10/705,235
Filing Date	Herewith
First Named Inventor	Hideki Kuwahara, et al.
Art Unit	To Be Assigned 2653
Examiner Name	To Be Assigned Letscher
Attorney Docket No.	YAO-4337US4

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
AL		US-5,898,544	04-27-1999	Krinke, et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Y ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
AL		JP 5-47126	02-26-1993	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
AL		JP 9-265738	10-07-1997	Hitachi, Ltd.		<input checked="" type="checkbox"/>
AL		JP 10-134534	05-22-1998	Hitachi, Ltd.		<input checked="" type="checkbox"/>
AL		JP 10-269732	10-09-1998	NEC Corp.		<input checked="" type="checkbox"/>
AL		JP 10-293979	11-04-1998	Fujitsu, Ltd., et al.		<input checked="" type="checkbox"/>
AL		JP 03-152775	06-28-1991	Hitachi, Ltd.		<input checked="" type="checkbox"/>
AL		JP 11-031368	02-02-1999	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
AL		JP 06-187624	07-08-1994	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
AL		JP 07-300397	11-14-1995	Matsushita Elec. Ind. Co., Ltd.		<input checked="" type="checkbox"/>
AL		JP 05-325274	12-10-1993	Canon, Inc.		<input checked="" type="checkbox"/>
AL		WO 98/44488 A1	10-08-1998	Seagate Technology, Inc.		<input checked="" type="checkbox"/>

Examiner Signature	GEORGE LETSCHER	Date Considered	2/21/05
--------------------	-----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 2 of 2

Applicant Number

10/705,235

Filing Date

November 10, 2003

First Named Inventor

Hideki Kuwajima, et al.

Art Unit

2653

Examiner Name

~~To Be Assigned~~ Letscher

Attorney Docket No.

YAO-4337US4

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JS		Australian Search Report dated October 31, 2003 (SG 200100498-5).	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature

GEORGE LETSCHER

Date

Considered

2/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

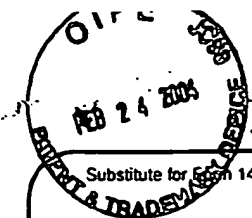
¹Applicant's unique citation designation number (optional).

²Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

DO NOT
PRINT



(AW 08/03)

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known

Application Number	10705,325
Filing Date	November 10, 2003
First Named Inventor	Hideki Kuwajima, et al.
Art Unit	2862 2653
Examiner Name	To Be Assigned Letscher
Attorney Docket No.	YAO-4337US4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO 98/19304 A1	05-07-1998	TDK Corp.	Entire Document	<input type="checkbox"/>
		WO 98/27547 A	06-25-1998	Seagate Technology, Inc.	Entire Document	<input type="checkbox"/>
		WO 99/01901 A1	01-14-1999	Kabushiki Kaisha Tokai Rika Denki Seisakusho	Entire Document	<input type="checkbox"/>
		EP 591885 B1	01-28-1998	Matsushita Electric Industrial Co., Ltd.	Entire Document	<input type="checkbox"/>
						<input type="checkbox"/>

Examiner Signature	GEORGE LETSCHER	Date Considered	2/21/05
-----------------------	-----------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

(Use as many sheets as necessary)

SHEET 2 of 2

Complete if Known

Application Number	To Be Assigned 10/705,235
--------------------	--------------------------------------

Filing Date	Herewith
--------------------	-----------------

First Named Inventor	Hideki Kuwajima, et al.
----------------------	-------------------------

Art Unit	To Be Assigned 2653
----------	--------------------------------

Examiner Name To Be Assigned Letscher

Attorney Docket No. YAO-4337US4

NON-PATENT LITERATURE DOCUMENTS

DO NOT
PRINT

**Examiner
Signature**

GEORGE LETSCHER

Date
Considered

2/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known

Application Number	To Be Assigned- 10/705,235
Filing Date	Herewith
First Named Inventor	Hideki Kuwajima, et al.
Art Unit	To Be Assigned- 2653
Examiner Name	To Be Assigned- Letscher
Attorney Docket No.	YAO-4337US4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
<i>[Signature]</i>		US-5,898,544	04-27-1999	Krinke, et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
<i>[Signature]</i>		JP 5-47126	02-26-1993	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 9-265738	10-07-1997	Hitachi, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 10-134534	05-22-1998	Hitachi, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 10-269732	10-09-1998	NEC Corp.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 10-293979	11-04-1998	Fujitsu, Ltd., et al.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 03-152775	06-28-1991	Hitachi, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 11-031368	02-02-1999	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 06-187624	07-08-1994	Fujitsu, Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 07-300397	11-14-1995	Matsushita Elec. Ind. Co., Ltd.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		JP 05-325274	12-10-1993	Canon, Inc.		<input checked="" type="checkbox"/>
<i>[Signature]</i>		WO 98/44488 A1	10-08-1998	Seagate Technology, Inc.		<input checked="" type="checkbox"/>

Examiner Signature	GEORGE LETSCHER	Date Considered	2/21/05
-----------------------	-----------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.